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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/823,223

04/13/2004

Annic Cheng

4646

29745

7590

02/28/2007

JOE NIEH

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EXAMINER

SCOTT JR, THOMAS E

ART UNIT

PAPER NUMBER

2609

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|-----------|---------------|
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3 MONTHS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/823,223 | | CHENG, ANNIE | |
| | Examiner | | Art Unit | |
| | Thomas E. Scott Jr | | 2609 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

2. Claims 3 and 8 to because of the following informalities: Claims 3 and 8 recite " a optical system". However, it would be better represented as "an optical system" because of a syntax problem. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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- Claims 2-5 and 7-10 recite the limitation of "a mouse" in line 1. There is insufficient antecedent basis for this limitation in the claim.
- Claims 1 and 6 recite the limitation of "the viewing window" in lines 5 and 7, respectively. There is insufficient antecedent basis for this limitation in the claim.
- Claims 1, 4 - 6, and 9 - 10 recite the limitation of "the computer" in line 10 (claim 1) and line 12 (claim 6). There is insufficient antecedent basis for this limitation in the claim.
- Claims 1-3 and 6 - 8 recite the limitation of "the position" in line 9 of claim 1 and line 11 of claim 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong (U. S. 2002/0084986 A1) in view of Hinckley, et. al. (U.S. 2002/0118168 A1).

In Claim 1, Armstrong (Fig. 4) discloses a horizontal scrolling mouse (200) comprising:

- a housing (104);

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- one or more selection buttons (105, 106) disposed on the housing
- a button (scroll-right button 202) with a preprogrammed right scrolling function to scroll the viewing window to the right disposed on the housing [0062];
- a button (scroll-left button 204) with a preprogrammed left scrolling function to scroll the viewing window to the left disposed on the housing [0062];
- a means (rotatable pointer control ball 110) to track the position of the mouse (200);
- a means (e.g. – circuit board 111) to communicate with the computer affixed within the housing (104) [0059]; and
- a microprocessor (microcontroller 114) affixed within the housing (104) and electrically connected to said selection buttons (105, 106), said button (202) with a preprogrammed right scrolling function, and said button (204) with a preprogrammed left scrolling function; wherein an user can operate the mouse (200) with one hand to easily view an image by scrolling horizontally with the preprogrammed right scrolling button (202) and the preprogrammed left scrolling button (204) [0063], [0003].
- Armstrong does not teach, “a scrolling wheel rotably disposed on the housing”. Hinckley teaches that a mouse (101) comprising a scrolling wheel (a wheel button 106) disposed on the housing (101). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have used the scrolling wheel of Hinckley to the mouse of Armstrong because the scrolling wheel would benefit users in providing the option of

cursor control dependent upon the location of the mouse relative to displayed items utilizing a scrolling wheel versus the availability scrolling control independent of the relative mouse position (see [0011] of Hinckley).

- In claim 6, this claim differs from claim 1 only in that the limitations of a right selection button disposed on the housing; a left selection button disposed on the housing; and a scrolling wheel rotably disposed between the right selection button and the left selection button on the housing are additionally recited. Armstrong teaches left and right selection buttons (103) disposed on the housing (200), but does not teach a scrolling wheel disposed between the two buttons. Hinckley teaches a scrolling wheel (106) disposed between the two buttons (105). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have added the scrolling wheel as taught by Hinckley between the two buttons of Armstrong's mouse for the same reasons as discussed in claim 1 above.
- In claims 2 and 7, Armstrong clearly teaches a rolling ball (rotatable ball 110 – Fig. 5).
- In claims 3 and 8, Armstrong teaches the means to track the position of the mouse being an optical system affixed within the housing [0025].
- In claims 4 and 9, Armstrong teaches a means (cable 102) to communicate with the computer being a wire [0059].
- In claims 5 and 10, Armstrong teaches the means to communicate with the computer is a wireless transmitter and receiver [0059].

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Ledbetter, et. al. (U.S. 2003/0025673 A1) discloses an input device capable of scrolling in multiple directions.
- Lindhout, et. al. (U.S. 2004/0001042 A1) discloses an apparatus comprising a depressible actuator providing multi-directional scrolling capability.

Inquiries

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas E. Scott, Jr. whose telephone number is (571) 270 1714. The examiner can normally be reached on Monday to Friday 7:30 AM – 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272 – 7772. The fax phone number for the organization where this

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application or proceeding is assigned is (571) 273-8300. Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217 – 9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, please call (800) 786-9199 (IN THE USA OR CANADA) or (571) 272 – 1000.

Thomas E. Scott, Jr.


Chanh Nguyen

Assistant Examiner

Primary Examiner

13 February 2007